

**AMENDMENTS TO THE CLAIMS:**

Please cancel without prejudice claim 5, amend claims 1-4 and 6-10 and add newly written claims 11-16 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) An optoelectronic device comprising:

at least one layer comprised of one of a dielectric layer or a semiconductor layer material,

first and second electrodes, said electrodes sandwiching said at least one layer between electrode structures, wherein at least one of the electrodes is a thin substantially semitransparent metal covering and separating said layer from air ~~comprising and at least semi-transparent,~~

said metal electrode having two surfaces, at least one of said surfaces including a periodic microstructure, ~~in contact with at least one surface of the substantially metal comprising and at least semi-transparent electrode characterised in that~~ wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at the ~~an~~ interface between the ~~dielectric layer or semiconductor layer~~ and the metal ~~electrode comprising, semi-transparent electrode~~ and are substantially scattered into propagating light, said propagation being out of the plane of the dielectric layer or semiconductor layer and the metal electrode comprising, semi-transparent electrode interface.

2. (currently amended) ~~A~~ The device according to claim 1 wherein the periodic microstructure is selected from one of the following structures:

the metal ~~comprising~~ electrode comprises a grating type structure on each of ~~its~~said two surfaces, wherein ~~the relationship between the microstructure of the two metal comprising surfaces is such that they are out of phase by  $\pi$  radians or substantially  $\pi$  radians;~~

a grating type structure present only at the interface between the metal ~~comprising~~ electrode and the ~~semiconductor or dielectric~~at least one layer; and

a grating type structure present at the metal ~~comprising~~ electrode/air interface only;

~~a further dielectric layer present at the surface of the metal comprising electrode remote from the dielectric/semiconductor layer, on which is present a grating type structure.~~

3. (currently amended) AThe device according to claim 2 wherein the periodic microstructure is ~~selected from a~~said grating type structure present at the metal ~~comprising~~ electrode/air interface ~~only wherein there is present~~further including an encapsulating layer on the metal electrode.

4. (currently amended) AThe device according to claim 1 wherein the periodic microstructures are one of a periodic sequence of valleys and hills, ~~or~~and a periodic sequence of grooves.

5. (cancelled).

6. (currently amended) AThe device according to claim 1 wherein the periodic microstructures ~~are~~is periodic in more than one direction on the surface.

7. (currently amended) ~~A~~The device according to claim 1 wherein the periodic microstructures ~~are~~is sub-wavelength.

8. (currently amended) ~~A~~The device according to claim 1 wherein the metal comprising electrode is an aluminium cathode.

9. (currently amended) ~~A~~The device according to claim 1 wherein the device is chosen from a light emitting diode, a photovoltaic cell or a photodiode.

10. (currently amended) ~~A~~The device according to claim 9 wherein the light emitting diode is an organic light emitting diode.

11. (new) An optoelectronic device comprising:  
at least one layer comprised of one of a dielectric and semiconductor material,  
first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said layer,  
said metal electrode having two surfaces, said metal electrode comprises a grating type structure on each of said two surfaces, wherein the microstructure of the two metal surfaces are out of phase by substantially  $\pi$  radians and wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

12. (new) An optoelectronic device comprising:  
at least one layer comprised of one of a dielectric and semiconductor material,  
first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said layer,  
said metal electrode having two surfaces, a grating type periodic microstructure is present only at the interface between the metal electrode and the at least one layer, wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

13. (new) An optoelectronic device comprising:  
at least one layer comprised of one of a dielectric and semiconductor material,  
first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said layer,  
said metal electrode having two surfaces, a periodic microstructure is present at the metal electrode/air interface only and wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

14. (new) An optoelectronic device comprising:  
at least one layer comprised of one of a dielectric and semiconductor material,

first and second electrodes, said electrodes sandwiching said at least one layer, wherein at least one of the electrodes is a thin semitransparent metal covering said layer,

said metal electrode having two surfaces, said device having at least one surface including a periodic microstructure, wherein the structure and positioning of the periodic microstructure is such that surface plasmon (SP) polariton modes are supported mainly at an interface between the layer and the metal electrode and are substantially scattered into propagating light, said propagation being out of the plane of the layer and the metal electrode.

15. (new) The device according to claim 14, wherein the periodic microstructure is on one of the two surfaces of said metal electrode.

16. (new) the device according to claim 14, wherein said at least one surface including a periodic microstructure is a surface of a dielectric layer located on one of said metal electrode surfaces.